CROSS REFERENCE TO RELATED CASES:

[0001] This is a continuation of application Serial No..09/ 784,898, filed February 16, 2001.

[0002] This application is related to Application Serial No. 10/ 382,409, filed March 6, 2003.

[0003] This application is related to Application Serial No. _____, filed May _____, 2004.

FIELD OF THE INVENTION

[0004] The present invention relates to a process of reducing sulfur content in a hydrocarbon stream. More specifically, the present invention relates to a membrane separation process for reducing the sulfur content of a naphtha feed stream, in particular, a FCC cat naphtha, while substantially maintaining the initial olefin content of the feed.

BACKGROUND OF THE INVENTION

[0005] Environmental concerns have resulted in legislation which places limits on the sulfur content of gasoline. In the European Union, for instance, a maximum sulfur level of 150 ppm by the year 2000 has been stipulated, with a further reduction to a maximum of 50 ppm by the year 2005. Sulfur in the gasoline is a direct contributor of SOx emissions, and it also poisons the low temperature activity of automotive catalytic converters. When considering the effects of changes in fuel composition on emissions, lowering the level of sulfur has the largest potential for combined reduction in hydrocarbon, CO and NOx emissions.

[0006] Gasoline comprises a mixture of products from several process units, but the major source of sulfur in the gasoline pool is fluid catalytic cracking (FCC) naphtha which usually contributes between a third and a half of the total amount of the gasoline pool. Thus, effective sulfur reduction is most efficient when focusing attention on FCC naphtha.

[0007] A number of solutions have been suggested to reduce sulfur in gasoline,

Amendment to the Specificiation:

Please replace paragraph [0003] with the following amended paragraph:

[0003] This application is related to Application Serial No. 10/846,818, filed May 14, 2004.